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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,463	06/27/2006	Zhendong Mike Zhou	061300-0843	8357

26371 7590 01/21/2009
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EXAMINER

MITCHELL, JOHN-PAUL N

ART UNIT	PAPER NUMBER
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3652

MAIL DATE	DELIVERY MODE
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01/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,463	Applicant(s) ZHOU ET AL.
	Examiner John-Paul N. Mitchell	Art Unit 3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20050914, 20051117</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-8, 10-16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Backer et al. (US Patent 5,249,643) in view of Raisio (US Patent 5,102,284). Backer et al. teach a land vehicle having a material handling apparatus comprising:

a support structure (Fig. 3, 3) coupled to a plurality of wheels (prox. 4), a cab (1) coupled to the support structure, a riser (11), coupled to the support structure, with a first telescopic actuator (14), a boom (Fig. 1, 27), coupled to the riser, with a second telescopic actuator (28), a first hydraulic actuator (19) coupled to the support structure and the riser, a second hydraulic actuator (29) coupled to the riser and boom, and a third hydraulic actuator coupled to the boom and jib, and a control apparatus (Fig. 8; col. 6, lines 46-48) coupled to said actuators to selectively control the apparatus. Further, Backer et al. teach an actuated (Fig. 1, 33) work platform (8) coupled to the end of the boom.

Backer et al. fail to teach, however, a third telescoping portion, or jib, with an associated telescopic actuator, and an actuated hook coupled to said jib. Raisio teaches a material handling apparatus with a boom (Fig. 1, 2), riser (4), and jib (10), with an

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actuated (Fig. 3, 25) hook (18) attached to the jib. Backer et al. teach that it is common and well known in the art to provide plural actuated, telescoping arms as a material handling apparatus, while Raisio teaches that it is common and well known in the art to provide 3 actuated arms with a hook attached to the end as a material handling apparatus. Thus, it would have been obvious to a person having ordinary skill in the art to provide a, actuated jib having a telescopic actuator coupled to a boom, and a hook coupled to the jib, in order to increase the range of motion and mobility of a material handling apparatus.

Backer et al. further teach a land vehicle having a material handling apparatus further comprising a rotation assembly (Fig. 1, 3; col. 3, lines 34-36), wherein the telescopic actuators are hydraulic (col. 4, lines 64-68), wherein the control apparatus is mounted on the structure and operable from a location remote from the cab (Fig. 1), and wherein the structure is configured as a truck (Fig. 1, vehicle).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Backer et al. in view of Raisio as recited above, and further in view of Capers et al. (US Patent 4,678,392). Backer et al. in view of Raisio teach the vehicle with a material handling apparatus as disclosed above, but fail to teach wherein the riser is movably coupled to the support structure for translation along the support structure. Capers et al. teach wherein a material handling apparatus coupled to a vehicle is movably coupled such to allow for translation along the support structure (Fig. 1, prox. 23 and 25). At the time of invention, it would have been obvious to a person having ordinary skill in the art to couple a material handling apparatus as taught by Backer et al. in view of Raisio in such

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a way as to allow translation along the support structure in order to increase mobility and maneuverability of the handling apparatus.

Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Backer et al. in view of Raisio as recited above, and further in view of Nist et al. (US Patent 4,941,546). Backer et al. in view of Raisio teach the vehicle with a material handling apparatus as disclosed above, but fail to teach wherein an outrigger assembly is coupled to the support structure. Nist et al. teaches a vehicle with a material handling apparatus that includes an outrigger assembly coupled to the support structure. At the time of invention, it would have been obvious to a person having ordinary skill in the art to provide an outrigger assembly to the support structure taught by Backer et al. in view of Raisio in order to increase stability of the support structure while the material handling apparatus is in use.

Conclusion

The prior art made of record and not relied upon, but considered pertinent to applicant's disclosure, includes: Wiener et al. (2001), Goiran et al. (2000), Chiron et al. (1996), Bean (2007), Muto et al. (1990), and Dimitriu (1988).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John-Paul N. Mitchell whose telephone number is (571) 270-5226. The examiner can normally be reached on 5/4/9.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on (571)272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Saúl J. Rodríguez/
Supervisory Patent Examiner, Art
Unit 3652

J-PNM